

APPLICANT: GLUKHOVSKY, Arkady  
SERIAL NO.: 10/808,573  
FILED: March 25, 2004  
Page 4

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#### REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

#### STATUS OF CLAIMS

Claims 37-51 are pending in the application. Claims 1-36 have been cancelled without prejudice and disclaimer. In making this cancellation without prejudice, Applicant reserves all rights in these claims to file divisional and/or continuation patent applications.

New claims 37-51 have been added in order to further define what the Applicant regards as the invention. Applicant respectfully asserts that no new matter has been added.

#### CLAIM REJECTIONS

##### 35 U.S.C. § 112 Rejections

In the Office Action, the Examiner rejected claim 1 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant respectfully traverses the rejection of claim 1 under 35 U.S.C. § 112. Since claim 1 has been cancelled, Applicant respectfully asserts that the rejection is now moot.

##### 35 U.S.C. § 101 Rejections

In the Office Action, the Examiner rejected claim 4 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Applicant respectfully traverses the rejection of claim 4 under 35 U.S.C. § 101. Since claim 4 has been cancelled, Applicant respectfully asserts that the rejection is now moot.

APPLICANT: GLUKHOVSKY, Arkady  
SERIAL NO.: 10/808,573  
FILED: March 25, 2004  
Page 5

### 35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 1, 2, 5, 6, 9, 10, and 17 under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent Application Publication 2002/0109774 to Meron et al. ("Meron").

Applicant respectfully traverses the rejection of claims 1, 2, 5, 6, 9, 10, and 17 under 35 U.S.C. § 102(b), as being anticipated by Meron. Since claims 1, 2, 5, 6, 9, 10, and 17 have been cancelled, Applicant respectfully asserts that their rejection is now moot.

In the Office Action, the Examiner rejected claims 1-4, 7, 9-13, 15-17 under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent Application Publication 2004/0158138 to Kilcoyne et al. ("Kilcoyne '138").

Applicant respectfully traverses the rejection of claims 1-4, 7, 9-13, 15-17 under 35 U.S.C. § 102(e) as being anticipated by Kilcoyne '138. Since claims 1-4, 7, 9-13, 15-17 have been cancelled, Applicant respectfully asserts that their rejection is now moot.

In the Office Action, the Examiner rejected claims 11, 12, 14, 18, 20-23, 25-29, 31, 33, and 36 under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent Application Publication 2002/0151816 to Rich et al. ("Rich").

Applicant respectfully traverses the rejection of claims 11, 12, 14, 18, 20-23, 25-29, 31, 33, and 36 under 35 U.S.C. § 102(b) as being anticipated by Rich. Since claims 11, 12, 14, 18, 20-23, 25-29, 31, 33, and 36 have been cancelled, Applicant respectfully asserts that their rejection is now moot.

### 35 U.S.C. § 103 Rejections

In the Office Action, the Examiner rejected claims 3 and 4 under 35 U.S.C. § 103(a), as being unpatentable over Meron in view of U.S. Patent Number 6,285,897 to Kilcoyne et al. ("Kilcoyne '897").

Applicant respectfully traverses the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Meron in view of Kilcoyne '897. Since claims 3 and 4 have been cancelled, Applicant respectfully asserts that their rejection is now moot.

APPLICANT: GLUKHOVSKY, Arkady  
SERIAL NO.: 10/808,573  
FILED: March 25, 2004  
Page 6

In the Office Action, the Examiner rejected claim 8 under 35 U.S.C. § 103(a), as being unpatentable over Kilcoyne '138 in view of U.S. Patent Number 3,682,160 to Murata et al. ("Murata").

Applicant respectfully traverses the rejection of claim 8 under 35 U.S.C. § 103(a), as being unpatentable over Kilcoyne '138 in view of Murata. Since claim 8 has been cancelled, Applicant respectfully asserts that their rejection is now moot.

In the Office Action, the Examiner rejected claims 15, 16, 19, 24, 30, 32, 34, and 35 under 35 U.S.C. § 103(a), as being unpatentable over Rich in view of Kilcoyne '897.

Applicant respectfully traverses the rejection of claims 15, 16, 19, 24, 30, 32, 34, and 35 under 35 U.S.C. § 103(a), as being unpatentable over Rich in view of Kilcoyne '897. Since claims 15, 16, 19, 24, 30, 32, 34, and 35 have been cancelled, Applicant respectfully asserts that their rejection is now moot.

#### New Claims

Applicant has added new claims 37-51.

Applicant's new independent claim 37 recites, *inter alia*, "determining a gradient between the output of the first and second pH sensors over time; and determining the direction of flow over the distance D based on the gradient". Meron, Kilcoyne '138, Rich, Kilcoyne '897, Murata, and/or the other prior art of record, alone or in combination, do not disclose, teach or suggest at least "determining a gradient between the output of the first and second pH sensors over time; and determining the direction of flow over the distance D based on the gradient". Applicant therefore asserts that new independent claim 37 is neither anticipated nor rendered obvious by the prior art of record, and is therefore allowable over the prior art of record.

New dependent claims 38-44 depend directly or indirectly from independent claim 37, include the features of claim 37, as well as additional distinguishing features, and are therefore neither anticipated nor rendered obvious by the prior art of record. Dependent claims 38-44 are therefore likewise allowable.

Applicant's new independent claim 45 recites, *inter alia*, "a processor configured to determine the direction of flow over the distance D based on a gradient between the output of

APPLICANT: GLUKHOVSKY, Arkady  
SERIAL NO.: 10/808,573  
FILED: March 25, 2004  
Page 7

the first and second pH sensors over time". Meron, Kilcoyne '138, Rich, Kilcoyne '897, Murata, and/or the other prior art of record, alone or in combination, do not disclose, teach or suggest at least "a processor configured to determine the direction of flow over the distance D based on a gradient between the output of the first and second pH sensors over time". Applicant therefore asserts that new independent claim 45 is neither anticipated nor rendered obvious by the prior art of record and is therefore allowable over the prior art of record.

New dependent claims 46-51 depend directly or indirectly from independent claim 45, include the features of claim 45, as well as additional distinguishing features, and are therefore neither anticipated nor rendered obvious by the prior art of record. Dependent claims 46-51 are therefore likewise allowable.

In view of the foregoing amendments and remarks, new claims 37-51 are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

#### Conclusion

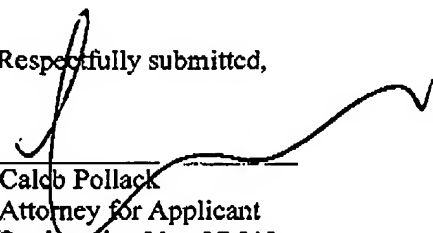
Applicant submits that in view of the foregoing amendment and remarks, and for at least the reasons presented above, claims 37-51 are allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

APPLICANT: GLUKHOVSKY, Arkady  
SERIAL NO.: 10/808,573  
FILED: March 25, 2004  
Page 8

No fee is believed to be due in connection with this paper. However, if any fee is in fact due, please charge any such fee associated with this paper to deposit account No.50-3355.

Respectfully submitted,



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Dated: July 26, 2006

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